5-HYDROXYTRYPTOPHAN (5-HTP)
is the immediate precursor in the biosynthesis of the neurotransmitter 5-hydroxytryptamine (5 HT or serotonin). 5-HT is synthesized from the amino acid L-tryptophan. 5-HTP has replaced the use of L-tryptophan in the United States. In 1989, patients taking L-tryptophan developed a negative and debilitating reaction called eosinophilia-myalgia syndrome. Upon further study, it was determined that the culprit was not the L-tryptophan. It was actually a bacterial contaminant in the formula. L-tryptophan products associated with the syndrome were found to come from genetically modified bacterial recombinant production methods. Even though L-tryptophan was proven safe, it never recovered from this incident. 5-HTP was created to fill the gap created by the removal of L-tryptophan in the marketplace.*

Small amounts of 5-HTP, as well as serotonin, are found in bananas, tomatoes, plums, avocados, eggplant, walnuts and pineapples. A common commercial source of 5-HTP is Griffonia simplicifolia, a relative to carob.*

5-HTP's possible pain reduction benefit comes from its conversion to serotonin and to the observed effect of raising beta-endorphin and platelet met-enkephalin levels.*
5 HTP

Serum leptin levels increased following 5-HTP injection in mice. This may explain 5-HTP’s beneficial effect on weight management. Additionally, 5-HTP has been shown to reduce carbohydrate intake.*

Contraindications:
1. Patients on MAOIs (approved 2 weeks after discontinuation)
2. Patients with carcinoid tumors
3. Should not be used concurrently with medications such as SSRIs, tricyclic antidepressants, MAOIs.
4. Should not be used concurrently with serotonin 5-HT1 receptor agonists including Naratriptan, Sumatriptan, and Zolmitriptan.
5. Patients with ischemic heart disease (Hx of myocardial infarction, angina pectoris, documented silent ischemia)
6. Patients with Hx of coronary artery spasm
7. Uncontrolled hypertension
8. Pregnant women and nursing mothers

Side effects:
Due to excessive serotonin production side effects could include nausea, diarrhea, loss of appetite, vomiting, difficult breathing, dilation of pupils, exaggerated reflexes, loss of muscle coordination, blurring of vision and cardiac dysrhythmias.

Note:
Carbidopa may increase 5-HTP transport across the blood brain barrier due to decreased peripheral 5-HTP metabolism.

Methyldopa inhibits conversion of 5-HTP to serotonin.

REFERENCES:

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.